

### **Department of Energy**

#### Ohio Field Office Fernald Area Office

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DOE-0048-02

OCT 18 2001

Mr. James A. Saric, Remedial Project Manager United States Environmental Protection Agency Region V, SRF-5J 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager Ohio Environmental Protection Agency 401 East 5<sup>th</sup> Street Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT FOR THE PERIOD SEPTEMBER 1, 2001 THROUGH SEPTEMBER 30, 2001, AND QUARTERLY REPORT JULY 1, 2001 THROUGH SEPTEMBER 30, 2001 INCLUDING ANTICIPATED WORK FOR THE PERIOD OCTOBER 1 THROUGH OCTOBER 31, 2001, AND EFFLUENT RADIATION REPORTS, RADON REPORTS, AND REMOVAL ACTION STATUS REPORT

This letter transmits the Consolidated Consent Agreement/Federal Facility Compliance Agreement/Federal Facility Agreement/Remedial Investigation/Feasibility Study/Consent Decree Monthly Report for the period September 1, 2001 through September 30, 2001, and the Quarterly Report for the period July 1, 2001 through September 30, 2001 including anticipated work for the period October 1 through October 31, 2001, and Effluent Radiation Reports, Radon Reports and the Removal Action Status Report. This report is formatted to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J. A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements," dated January 16, 1996, and agreed to by the United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA).

Mr. James A. Saric Mr. Tom Schneider

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If you have any questions, please contact me at (513) 648-3139.

Sincerely,

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FEMP: Reising

Johnny W. Reising Fernald Remedial Action Project Manager

Enclosures: As Stated

cc w/enclosures:

- R. Greenberg, EM-31/CLOV
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- P. Dunn, FRESH
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AR Coordinator, Fluor Fernald, Inc./MS78

cc.w/o enclosures:

- A. Tanner, OH/FEMP
- F. Bell, ATSDR
- M. Schupe, HSI GeoTrans
- D. Carr, Fluor Fernald, Inc./MS2
- T. Hagen, Fluor Fernald, Inc./MS65-2
- S. Hinnefeld, Fluor Fernald, Inc./MS31
- B. Irvine, Fluor Fernald, Inc./MS28
- R. McDonough, Fluor Fernald, Inc./MS80-3
- T. Poff, Fluor Fernald, Inc./MS65-2
- C. Sutton, Fluor Fernald, Inc./MS35
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#### Introduction

This report describes actions at the Fernald Environmental Management Project (FEMP) from July 1, 2001 through September 30, 2001. The monthly and quarterly reports have been revised to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J. A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements", dated January 16, 1996, and agreed to by USEPA and OEPA.

The Department of Energy - Fernald, has given direction to utilize the submittal of the Quarterly Integrated Environmental Monitoring Plan (IEMP) reports to satisfy the effluent radionuclide reporting requirements of the Consolidated Consent Agreement/Federal Facility Compliance Agreement/Federal Facility Agreement/Remedial Investigation/Feasibility Study/Consent Decree Quarterly Report.

#### **OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT**

#### July 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Loaded 12,053 tons of material from waste pits
  - Shipped 60 railcars (UT41) of material for disposal at Envirocare

#### August 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Loaded 11,841 tons of material from waste pits
  - Shipped 120 railcars (UT42 and UT43) of material for disposal at Envirocare

#### September 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Loaded 13,028 tons of material from waste pits
  - Shipped 180 railcars (UT44, UT45 and UT46) of material for disposal at Envirocare

- Enforceable Milestones To Be Completed
  - None
- Major Work To Be Initiated/Continued/Completed
  - Load 9,047 tons of material from waste pits
  - Ship 60 railcars of material for disposal at Envirocare

OPERABLE UNIT 2 - ON-SITE DISPOSAL FACILITY AND SOIL CHARACTERIZATION AND EXCAVATION PROJECT

(Additional OU2 soils-related activities reported under OU5/Soils Characterization and Excavation Project)

July 2001

- Enforceable Milestones Completed
  - On-Site Disposal Facility (OSDF)
    - None
  - Soil Characterization and Excavation Project (SCEP)
    - None
- Major Work Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Operated Bulk Debris Material Transfer Area expansion
    - Continued construction of Cell 1 cap
    - Completed testing of the Enhanced Permanent Leachate Transfer System
  - Soil Characterization and Excavation Project (SCEP)
    - Area 1
      - Continued to prepare draft final CDL change pages for certification of the OSDF Equipment Wash footprint
      - Submitted Variance to Certification PSP for certification of the OSDF Equipment Wash footprint and surrounding area
      - Received approval from Agencies for the Area 1, Phase III
         Part 1 Certification Report
    - Area 2
      - Submitted comment responses for the Integrated Remedial
         Design Package for the Area 2, Phase I Perimeter Area
      - Completed removal of Well House 13
    - Natural Resources
      - Submitted the draft version of the Final Natural Resource Restoration plan to Natural Resources Trustees on July 31, 2001

#### August 2001

- Enforceable Milestones Completed
  - On-Site Disposal Facility (OSDF)
    - -- None
  - Soil Characterization and Excavation Project (SCEP)
    - None
  - Major Work Initiated/Continued/Completed
    - On-Site Disposal Facility
      - Continued operation of the Bulk Debris Transfer Expansion Area
      - Continued construction of the Cell 1 cap
      - Continued breaking/crushing concrete in Area 3A
      - Began placement of Impacted Material in Cells 2 and 3
    - Soil Characterization and Excavation Project (SCEP)
      - Area 1, Phase II
        - Submitted variances for Certification Sampling of the Equipment Wash Facility and the drainage line
        - Collected certification samples of the Equipment Wash
           Facility and the drainage line
      - Area 1, Phase III
        - Submitted the approved Final A1P3, Part 1 certification report to the Agencies
      - Area 2, Phase I
        - Received agency approval on the Response to Comments on the Integrated Remedial Design Package for the A2PI Perimeter
        - Submitted the Certification Design letter and PSP for Certification Sampling
        - Completed removal of Well House 13 and began removal of Basin 1 and perimeter impacted materials in the Southern Waste Units
      - Natural Resources
        - Continued efforts on the Prairie Grass and Burrowing Mammal Research projects for the OSDF Cap
        - Continued monitoring in the A1P1 Wetlands and A8P2
           Restoration Project
        - Completed minor maintenance activities in certified and restored areas

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CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1, 2001 THROUGH
SEPTEMBER 30, 2001 AND QUARTERLY REPORT JULY 1, 2001 THROUGH
SEPTEMBER 30, 2001, INCLUDING ANTICIPATED WORK FOR THE PERIOD OCTOBER 1
THROUGH OCTOBER 31, 2001, AND EFFLUENT AND RADON DATA AND REMOVAL
ACTION STATUS REPORT

 Collected baseline ecological data to support future monitoring of restored areas.

#### September 2001

- Enforceable Milestones Completed
  - On-Site Disposal Facility (OSDF)
    - None
  - Soil Characterization and Excavation Project (SCEP)
    - None
- Major Work Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Continued operation of the Bulk Debris Transfer Area Expansion
    - Continued construction of the Cell 1 cap
    - Continued placement of Impacted Materials in Cells 2 and 3
    - Continued screening of soil for Cells 4 and 5 clay liner material
  - Soil Characterization and Excavation Project (SCEP)
    - Area 1, Phase II
      - Submitted variance for sampling of the Equipment Wash Facility drain line
    - Area 2. Phase I
      - Continued excavation of Southern Waste Units and Perimeter Area
    - Area 2, Phase II
      - Submitted variance for bounding of arsenic south of Silo's area perimeter road
    - Area 3A/4A
      - Began drafting PSP for the Area 3A/4A Excavation
         Characterization and Precertification
        - Continued breaking/crushing concrete in Area 3A
    - Area 3B/4B
      - Began drafting PSP for Area 3B/4B/5 Above OSDF WAC bounding
    - Area 4B
      - Submitted PSP for Area 4B Potentially Characteristic Area and West of Pilot Plant Predesign Investigation

- Area 6
  - Began drafting PSP for Predesign Sampling in the Solid
     Waste Landfill and the Fire Training Facility
  - Submitted variance for further bounding of AWAC material
     north of Plant 1 Pad
- Natural Resources
  - Completed collection of baseline ecological data
  - Issued Ecological Research Annual Reports for 2000
  - Developed Deer Management Plan for the FEMP

- Enforceable Milestones To Be Completed
  - On-Site Disposal Facility (OSDF)
    - None
  - Soil Characterization and Excavation Project (SCEP)
    - None
- Major Work To Be Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Continue operation of Bulk Debris Transfer Area Expansion
    - Continue construction of the Cell 1 cap
    - Continue placement of Impacted Materials in Cells 2 and 3
    - Continue screening of soil for Cells 4 and 5 clay liner material
    - Begin Phase I and Phase II leachate removal
- Soil Characterization and Excavation Project (SCEP)
  - Area 1
    - Submit draft final CDL change pages for certification of the OSDF
       Equipment Wash footprint
  - Area 2
    - Anticipate receiving comments on the A2PI Certification PSP and CDL and responding to those comments
    - Complete the arsenic chasing in Area 2 Phase II
  - Area 3A/4A
    - Submit drafting PSP for the Area 3A/4A Excavation
       Characterization and Precertification
    - Continue breaking/crushing concrete in Area 3A
    - Begin Lime Sludge Pond excavation and placement in OSDF

- Area 4B
  - Expect to begin sampling at the Pilot Plant
- Area 6
  - Submit Predesign Sampling Plan for the Fire Training Facility and the Solid Waste Landfill
- Natural Resources
  - Issue Wetland Mitigation Monitoring Report for 2000
  - Issue Final Natural Resource Restoration Plan to Agencies and Natural Resources Trustees

#### **OPERABLE UNIT 3 - FACILITIES CLOSURE AND DEMOLITION PROJECT**

July 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Transition Work
    - Continued work on pipe Bridge
    - Completed relocation work on Trailer T-130 and continued modifications to T 65
    - Continued bagging of Asbestos Containing Materials (ACM)
  - Plant 6
    - Area 1
      - Continued penthouse demolition, internal ACM, VAT removal and interior Transite Removal
    - Area 2
      - Began to shear and demo equipment and haul to wash down
      - Continued interior transite removal
      - Continued below grade dismantlement and removal of equipment and debris
  - Facilities Shutdown
    - Continued Plant 2/3 Construction Support
    - Continued planning for Building 53
    - Completed removing laundry equipment for shipment to Mound

#### August 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Transition Work
    - Continued work on Pipe Bridge
    - Continued to glove bag Asbestos Containing Materials (ACM) and Asbestos Abatement
    - Reinstalled utilities to T-95 and T-130
    - Begin Heat Tracing and Insulation of T-95 lines
    - Continued Interior Transite, ACM and Equipment Removal in Building 3C
  - Plant 6
    - Area 1
      - Continued Equipment Removal, Interior Transite Removal and Ceiling Tile Removal
    - Area 2
      - Continued Interior Miscellaneous Demolition
    - Area 4
      - Began Release Cleaning
    - Area 5
      - Began ACM Roof Removal
    - Area 7
      - Began Release Cleaning
    - Area 8
      - Began ACM Piping and Interior Dismantlement
      - Began Release Cleaning
  - Facilities Shutdown
    - Continued Planning Work for Health and Safety Building, 53A
    - Began Planning Work for Buildings 64 and 65
    - Continue Plant 2/3 Construction Support

#### September 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Transition Work
    - Continue Pipe Bridge

- Completed Demolition of Building 3B and 3C Structures (Structural Steel)
- Plant 6
  - Area 1/2
    - Continued Interior Miscellaneous Demolition
    - Began release cleaning
    - Began Exterior Transite Removal
  - Area 3
    - Began Exterior Transite Removal
  - Area 5
    - Completed Dismantlement of Maintenance Shop and Tool Room Structural
  - Area 6
    - Began Structural Demolition
  - Area 6A
    - Conducted housekeeping/miscellaneous activities
  - Area 7
    - Began Transite Removal
    - Began Structural Demolition
  - Area 8
    - Completed Clean Release
  - Dock Area
    - Began Structural Demolition
- Facilities Shutdown
  - Continued planning work for Building 53A, Buildings 64 and 65, and Vit Plant Equipment Removal
  - Completed Laundry Equipment Removal

- Enforceable Milestones To Be Completed
  - None
- Major Work To Be Initiated/Continued/Completed
  - Transition Work
    - Complete Structural Disposal of Building 3B and 3C
    - Continue Pipe Bridge
  - Plant 6
    - Area 1/2
      - Continue Exterior Transite Removal
      - Continue Release Clean
    - Area 3

- Begin Structural Demolition
- Area 7
  - Continue Transite Removal
- Facilities Shutdown
  - Continued planning work for Building 53A, Buildings 64 and 65, and
     Vitrification Plant Equipment Removal
  - Begin Utility Disconnects and Salvageable Equipment in Vitrification Plant

#### **OPERABLE UNIT 4 - SILOS PROJECT**

July 2001

- Enforceable Milestones Completed
  - Submitted the revised Silo 3 Remedial Design Deliverables Schedule to the Agencies on July 13, 2001, meeting the July 15, 2001 milestone. The schedule was approved by Ohio EPA on July 19, 2001, and USEPA on July 23, 2001. The document establishes milestones for submittal of a draft Revised Silo 3 Remedial Design package (08/23/02) and for submittal of a draft Silo 3 remedial Action Work plan (10/06/03).
- Major Work Initiated/Continued/Completed
  - Received Ohio EPA approval of the revised Remedial Action Work plan for Radon Control System (RCS) Phase 1 Operation on July 16, 2001; the document was disapproved by USEPA on July 23, 2001. A milestone date of August 22, 2001 was established for re-submittal of the RA Work Plan.
  - Received USEPA approval of the Silos Project Regulatory Milestone Strategy on July 23, 2001. This document establishes new regulatory milestones for the Silos 1 and 2, Silo 3 and Accelerated Waste Retrieval (AWR) projects, consistent with the revised closure Contract baseline
  - Issued the Silos 1 and 2 Accelerated Waste Retrieval (AWR) Project Transition and Execution Strategy
  - Continued Due Diligence design reviews and other AWR Project contract transition activities
  - Continued conceptual design for Silo 3 and Silos 1 and 2 Projects

#### August 2001

- Enforceable Milestones Completed
  - The revised draft Remedial Action (RA) Work Plan for Radon Control System (RCS)
     Phase 1 Operation was submitted to the Agencies on August 16, 2001. The RA

Work Plan was approved by U.S. EPA on August 20, 2001

- Major Work Initiated/Continued/Completed
  - Continued Due Diligence design reviews, reviews of vendors and subcontractors, and other AWR project transition activities. Material deliveries and preparations for resumption of construction activities took place
  - Presented briefing for the Agencies on August 15, 2001
  - Initiated informal external review and internal FEMP review of the Conceptual
     Design Package for the Silos 1 and 2 Project

#### September 2001

- Enforceable Milestones Completed
  - The revised Remedial Design (RD) Work Plan for the Silo 1 and 2 Project was submitted to the Agencies meeting the October 1, 2001 milestone
  - The revised Remedial Design/Remedial Action (RD/RA) Schedule for the Accelerated Waste Retrieval (AWR) Project was submitted to the Agencies meeting the October 1, 2001 milestone
- Major Work Initiated/Continued/Completed
  - Completed Due Diligence review of the Radon Control System (RCS) design;
     continued Balance of Plant (BOP) Due Diligence review
  - Continued reviews of vendors and subcontractors, and other AWR Project transition activities
  - Began incorporation of comments from internal FEMP review, and informal external review of the Conceptual Design Report for the Silos 1 and 2 Project
  - Initiated engineering studies to obtain supplemental data to support Silos 1 and 2
     Conceptual Design
  - Initiated design of the shipping/disposal container for treated Silos 1 and 2 material
  - Initiated Design Data Development testing to support Silo 3 Project design
  - Continued development of process flow diagrams and other Silo 3 Conceptual design activities

- Enforceable Milestones To Be Completed
  - None
- Major Work To Be Initiated/Continued/Completed
  - Present briefing on Silos Project activities at the October Cleanup Progress
     Briefing

- Continue preparation of Silos 1 and 2 and Silo 3 Conceptual Designs
- Initiate preparation of Remedial Design package for the Silo 3 Project
- Continue BOP Due Diligence evaluation and evaluation of alternatives for the AWR Project waste retrieval design
- Initiate erection of exhaust stack, Transfer Tank Area (TTA) Tanks, and other AWR project field activities
- Initiate removal piping and equipment associated with the old Radon Treatment System in preparation for Accelerated Waste Retrieval (AWR) Project construction
- Initiate removal of equipment from the Vitrification Pilot Plant in preparation for renovation of the building to serve as a maintenance shop to support Silos project operations.

#### **OPERABLE UNIT 5 - AQUIFER RESTORATION AND WASTEWATER PROJECT**

July 2001

- Enforceable Milestones Completed
  - Submitted monthly NPDES Discharge Monitoring Report for June to the Ohio EPA on July 19, 2001
  - Submitted the NPDES Noncompliance Report for June to the Ohio EPA on July 19, 2001
  - Met the monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work Initiated/Continued/Completed
  - Submitted the May 2001 Operating Report for the Re-Injection Demonstration to the Agencies on July 18, 2001
  - Began work on the technical memorandum to establish baseline groundwater conditions for OSDF cells 1, 2, and 3
  - Developed a revised treatment method to alleviate plugging in the re-injection wells. The plan involves the use of hydrochloric and phosphoric acid with an "acid enhancer," as recommended by industry consultants
  - Initiated construction of infrastructure of Waste Storage Area Extraction System
     Phase I and South Field Extraction System Supplemental Well on July 9; initiated underground piping to Extraction Well #26
  - Installed Supplemental Well and tested pump in South Field Extraction System
  - Installed pumps numbers 26, 27, and 28 in Waste Storage Area Extraction Wells
     (Phase I) and tested pumps in number 26 and 27

#### August 2001

- Enforceable Milestones Completed
  - Submitted monthly NPDES Discharge Monitoring Report for July to the Ohio EPA on August 15, 2001
  - Met the monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work Initiated/Continued/Completed
  - Submitted the June 2001 Operating Report for the Re-Injection Demonstration on August 15 to DOE for transmittal to the Agencies, DOE submitted to the Agencies on August 22
  - Continued work on the technical memorandum to establish baseline groundwater conditions for OSDF Cells 1, 2, and 3. Met with the Agencies on August 23 to provide them with an update of the data elevation being conducted for the Technical Memorandum
  - Conducted a public meeting on August 23 on the Explanation of Significant Differences on the adoption of the Safe Drinking Water Act MCL for uranium into the OU5 ROD
  - Submitted the Responses to OEPA Comments on the Pumping Test Report, Pilot Plan Drainage Ditch Uranium Plume on August 16 to DOE for transmittal to the Agencies, DOE submitted to the Agencies on August 22
  - Submitted a Project Specific Plan (PSP) for installation of monitoring wells for OSDF cells 4-7 to DOE on August 8, DOE submitted the PSP to the Agencies on August 14
  - Completed review of revised treatment method for alleviating plugging in reinjection wells. Began using the revised treatment method at Injection Well 12 on August 27, 2001
  - Completed development of Waste Storage Area Extraction System Phase I Well
     #28

#### September 2001

- Enforceable Milestones Completed
  - Submitted monthly NPDES Discharge Monitoring Report for July to the OEPA on September 18, 2001
  - Met the monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision

- Work Initiated/Continued/Completed
  - Submitted the July 2001 Operating Report for the Re-Injection Demonstration on September 6, 2001 to DOE for transmittal to the Agencies. DOE submitted to the Agencies on September 17, 2001
  - Submitted the Response to the OEPA's Conditional Approval of Wetland Permitting Crosswalk for the Waste Storage Area Extraction System and South Field Extraction System Supplemental Well Project to the DOE on September 20, 2001
  - Continued work on the technical memorandum to establish baseline groundwater conditions for OSDF Cells 1, 2, and 3. Met with the Agencies on August 23, 2001 to provide an update of the data elevation being conducted for the Technical Memorandum
  - Completed rehabilitation of Injection Well 12 (IW-12) utilizing the revised treatment method. IW-12 was brought back on-line at an injection rate of 150 gallons per minute on September 26, 2001. Began revised treatment of IW-11 on September 24, 2001

- Enforceable Milestones To Be Completed
  - Submit monthly NPDES Discharge monitoring Report to the OEPA
  - Meet the monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work To Be Initiated/Continued/Completed
  - Continue to perform maintenance/rehabilitation on injection and extraction wells
  - Continue construction of Waste Storage Area Extraction System Phase I and
     South Field Extraction System Supplemental Well
  - Continue to work on OSDF baseline technical memorandum for groundwater (perched and Great Miami Aquifer)
  - Begin design of South Field Extraction System Phase II
  - Begin work on Project Specific Plans (PSPs) for installation of additional monitoring wells in the Waste Storage, South Field and South Plume Areas
  - Install monitoring wells for OSDF Cells 4 and 5
  - Install a multilevel monitoring well in the South Field

#### **WASTE MANAGEMENT**

July 2001

- Enforceable Milestones Completed
  - None
- Work Initiated/Continued/Completed
  - Hazardous Waste Project
    - Packaged and shipped 12 drums of ballasts, 3 drums of NI-Cad batteries, 107 boxes of electrical waste for recycle with Recyclight
    - Continued segregating legacy wastes in the Chemical Management Program
  - Inorganic Treatment Project
    - Continued development of work plan for processing broken Lead Acid Batteries and Elemental Lead
  - Liquid Mixed Waste (Bulking) Project
    - Initiated Batch 10 shipment schedule for August 3, sent 10 day notice of shipment to TSCAI
    - Developing location for consolidation tank in the bulking area for Batch 12 Bulking efforts
  - Neutralization/Precipitation/Deactivation/Stabilization Project (NPDS)
    - Identified and procured 5 TOC boxes for NPDS Thorium shipment
  - Organic Treatment Project
    - Prepared and submitted TRB submittal package
  - Thorium Legacy Waste Project (TLWP)
    - Completed last shipment of Thoria Gel
    - Moved 123 containers of Thorium Trash to Building 64 East Pad
    - Initiated Trash Sorting and packaged 8 boxes of trash from within Building 67
    - Initiated comprehensive revision to the Super Thorium profile
    - Received notice that Building 64/65 is to be vacated by February 2002
  - Wastewater Treatment Project
    - Submitted AWWT 1016 (16 containers) for Waste Characterization release
  - Waste Minimization/Pollution Prevention
    - Finalized Sanitary Waste Disposal and Paper Recycling Statement of Work
    - Continue to revise Oil Recycling contract
    - Shipped LaserJet cartridges to Northstar Warehouse

#### August 2001

- Enforceable Milestones Completed
  - None

- Work Initiated/Continued/Completed
  - Hazardous Waste Project
    - Completed removal of chemicals in MS-26 and MS-6
    - Surveyed 8 of 10 skids of bagged chemicals in Building 54B
    - Segregated unknowns into a safe configuration with flammable and corrosive chemicals onto separate skids
    - Continued to segregate RAD contaminated chemicals and free-release acceptable chemicals
    - Continued to collect MSDSs on inventoried chemicals
    - Scheduled Heritage shipment for week of September 10th
  - Inorganic Treatment Project
    - Continued development of work plan for processing broken Lead Acid Batteries and Elemental Lead and establishment of waste campaigns for inventory
  - Liquid Mixed Waste (Bulking) Project
    - Shipped Batch 10, Shipment 1, 2, 3 to the TSCA Incinerator
    - Continued working toward placement of Consolidation Tank in the Bulking Area for Batch 12 bulking efforts
  - Neutralization/Precipitation/Deactivation/Stabilization Project (NPDS)
    - Completed absorbent and compatibility determinations and SC&PCRD
  - Organic Treatment Project
    - Continued to revise TRB Package
  - Thorium Legacy Waste Project (TLWP)
    - Unpacked 25 drums and 16 boxes of thorium trash, generating 17 boxes to be shipped to NTS
    - Completed movement of Thorium Trash to Building 64/65
    - Completed set up of airlines to support Trash Sorting
    - Initiated Drum Punch fabrication
    - Continued evaluation options for alternate treatment and processing location to support Building 64/65 turnover to D&D
  - Waste Minimization/Pollution Prevention
    - Finalized Sanitary Waste Disposal and Paper Recycling Statement of Work
    - Continued to revise Oil Recycling contract
    - Donated aluminum cans to Crosby Elementary

#### September 2001

- Enforceable Milestones Completed
  - None

- Work Initiated/Continued/Completed
  - AWWT Liquids (Wastewater Treatment Project)
    - Completed Task order 2001-175 operations for oil/water separation of AWWT 1016 on September 21, 2001, resulting in 7 containers (1,334 pounds) water and 14 containers (4,365 pounds) oil
  - Hazardous Waste Project
    - Packaged 14 (55 gallon), 5 (5 gallon), 5 (cubic yard boxes) and 3 (20 gallon)
       container of free-released chemicals in preparation of shipment
    - Rescheduled shipment of photochemicals, at the direction of the DOE, for October 3, 2001
    - Reviewing bids for unused, excess chemical contract
    - Completed segregation of flammable and corrosive chemicals onto separate skids
    - Continued to segregate RAD contaminated chemicals and free-release and acceptable chemicals
  - Incinerator Liquids (Liquid Mixed Waste Project)
    - Completed Batch 10 shipments to the TSCA Incinerator on September 6, 2001
    - Initiated bulking of Batch 12 with remaining 8,943 pounds remaining from Batch 10 heel
    - Bulked waste from 96 containers of Batch 12 inventory into Batch 12
    - Submitted Batch 11 application to the TSCA Incinerator/State of Tennessee
    - Continued working toward placement of Consolidation Tank in the Bulking Area
  - Neutralization/Precipitation/Deactivation/Stabilization Project (NPDS)
    - Received approval of TRB package
  - Organic Treatment Project
    - Received approval of TRB package
  - Thorium Legacy Waste Project (TLWP)
    - Completed set up of airlines to support Trash Sorting, awaiting breathing tubes
    - Sorted 8 drums of trash generating one box of trash for Nevada Test Site (NTS) and loaded 3 sealands of trash for shipment to NTS
    - Identified "E" area as the new location for thorium on Plant 1 Pad
  - Waste Minimization/Pollution Prevention
    - Placed Sanitary Waste Disposal and Paper Recycling Request for Proposal out for bid
    - Continued to revise Oil Recycling contract

- Enforceable Milestones To Be Completed
  - None

- Work To Be Initiated/Continued/Completed
  - AWWT Liquids (Wastewater Treatment Project)
    - Continue activities for future staging/transfer wastewater treatment operations at Building 79
  - Hazardous Waste Project
    - Complete segregation of chemicals from Chemical Management Program at B-54B
    - Continue survey of Containerized Chemicals
    - Perform photochemical shipment from Springdale
  - Incinerator Liquids (Liquid Mixed Waste (Bulking) Project)
    - Continue Batch 12 bulking activities
    - Complete consolidation tank location at bulking area
  - Inorganic Treatment Project
    - Continue working on waste campaigns
  - Organic Treatment Project
    - Begin overpacking of First Article Testing drums
    - Compete campaign development for current uncharacterized inventory
  - Sample Disposition
    - Commence Building 68 preparations for Sample Disposition operations upon completion of Aerosol Can Puncturing Project
  - Thorium Legacy Waste Project (TLWP)
    - Continue sorting and packaging Thorium Trash for shipment to NTS
    - Initiate construction of shield wall for relocation of thorium inventory

## **ENCLOSURES A & B**

# EFFLUENT AND RADON DATA ARE NOW REPORTED IN THE IEMP SUBMITTAL

### **ENCLOSURE C**

### REMOVAL ACTION STATUS REPORT

Note: All Removal Action except 3, 9, 12, 17, 26 and 27 are completed and closed. Removal Action 3, 9, 12, 17, 26 and 27 are Programmatic Removal Actions and work continues under them. All documentation for work done this quarter under these Programmatic Removal Actions is located in the Post-Rod files. Gradually work performed under these actions is being phased out and being done pursuant to appropriate Remedial Actions.

# CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1, 2001 THROUGH SEPTEMBER 30, 2001 AND QUARTERLY REPORT JULY 1, 2001 THROUGH SEPTEMBER 30, 2001, INCLUDING EFFLUENT AND RADON DATA AND REMOVAL ACTION STATUS REPORT

REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Extraction of Water Under FEMP Buildings AKA: Plant 6 Contaminated Perched Water	1	Closed	September 13, 1995	Pump water from extraction wells underneath Plants 2/3, 6, 8, and 9. Treat extracted water for volatile organic chemicals and uranium removal before discharge
Waste Pit Area Runoff Control	2	Closed	July 2, 1992	Collect and treat contaminated storm water run-off from the waste pit area
South Plume	3	Closed, transferred to Post-ROD	May 22, 1997	Collect and treat contaminated storm water from waste pit area, Install new alternate wate supply, pump an discharge groundwater from South Plume, Install and operate interim Advanced Waste Water Treatment System, Conduct groundwater monitoring and institutional controls, conduct groundwater modeling and geochemical investigation
Silo 1 and 2	4	Closed	May 17, 1994	Install bentonite cap to reduce and monitor radon emissions, provide follow-on monitoring
K-65 Decant Sump Tank	5	Closed	March 5, 1993	Periodically remove liquid from K-65 decant sump tank
Waste Pit 6 - Exposed Material	6	Closed	March 25, 1992	Eliminate potential airborne contamination by resubmerging exposed pit material
Plant One Pad Continuing Release	7	Closed	February 16, 1995	Implement run-on/off control, install new pad, and upgrade existing Plant 1 Storage Pad
Inactive Flyash Piles/ South Field Area	8	Closed	December 23, 1991	Install plastic chain link barrier and post warning signs
Removal of Waste Inventory	9	Closed - Transferred to Post-ROD	May 22, 1997	Disposition of low-level waste off-site
Active Flyash Pile Controls	10	Closed	May 16, 1997	Complete interim surface stabilization and complete active Flyash pile controls
Pit 5 Experimental Treatment Facility (ETS)	11	Closed	April 22, 1992	Remove contents, structure, and filter material. Backfill and cap with clay cover
Safe Shutdown	12	Closed - Transferred to Post-ROD	May 22, 1997	Remove uranium and other material from former processing equipment and ship material and equipment off-site
Plant 1 Ore Silos	13	Closed	November 6, 1995	Dismantle fourteen ore silos and their support structures
Contaminated Soils Adjacent to Solid Waste Incinerator at the Sewage Treatment Plant	14	Closed	January 3, 1995	Isolate or remove and dispose of contaminated soils from the vicinity of the sewage treatment plant

00002

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REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Scrap Metals Pile	15	Closed	November 14, 1994	Disposition of LLW Ferrous/non-ferrous scrap metal, Containerize and dispose of scrap copper
Collect Uncontrolled Production Area Runoff - Northeast	16	Closed	May 22, 1997	Collect storm water run-off from the northeast perimeter of the former production area in the Storm Water Retention Basin
Improved Storage of Soil and Debris	17	Closed - Transferred to Post-ROD	May 22, 1997	Improve storage of existing and future generated soils and debris
Control Exposed Material in Pit 5	18	Closed	May 13, 1993	Eliminate potential airborne contamination by re-submerging exposed pit material
Plant 7 Dismantling	19	Closed	August 18, 1995	Dismantle and dispose of the Plant 7 structure
Uranyl Nitrate Neutralization Project	20	Closed	January 16, 1997	Neutralize, filter and package UNH inventory
Silo 3	21	Closed	February 24, 1993	Mitigate the potential release of hazardous waste material by covering and sealing dust collector hopper, removing dust collector, and capping and covering obvious release pathways
Waste Pit Area Containment Improvement	22	Closed	August 1, 1993	Stabilize south barrier of Pit 4; regarding drainage ditches along Pits 3, 4, 5, and 6: and resurface road between Pits 3, 4, 5, and 6
Inactive Flyash Pile	23	Closed	June 29, 1992	Conduct field investigation to identify locations requiring material removal
Pilot Plant Sump	24	Closed	January 14, 1994	Remove liquid and sludge from the sump
Nitric Acid Rail Car	25	Closed	November 12, 1993	Remove residual contents from tank car and decontaminate and dispose of tank car
Asbestos Removal	26	Closed - Transferred to Post-ROD	May 22, 1997	Mitigate the potential for contaminant and migration of asbestos fibers
				<b>N</b>

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REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Management of Contaminated Structures	27	Closed - Transferred to Post-ROD	May 22, 1997	Management of contaminated structures
Fire Training Facility	28	Closed	July 11, 1995	Remove, decontaminate, dispose, treat or store contaminated structures, equipment, and soil from the former Fire Training Facility
Erosion Control of Inactive Flyash Pile; AKA: Temporary Nitrate Storage Tanks	29	Closed	March 2, 1994	Mitigate the threat of erosion induced slope failure and discharge of flyash to Paddy's Run
KC2 Warehouse Well	30	Closed	May 28, 1997	Plug and Close, well plugged
South Field and Inactive Flyash Piles Seepage Control Project	31	Closed	December 6, 1995	Minimize future groundwater contamination by intercepting contaminated seeps that drain from the South Field and Inactive Flyash Pile and infiltrate to the GMA